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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,983	01/30/2001	Junichi Hayashi	35.C15073	9440
5514	7590	11/02/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			COUSO, YON JUNG	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	
			2625	

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/771,983	<b>Applicant(s)</b> HAYASHI ET AL.	
	<b>Examiner</b> Yon Couso	<b>Art Unit</b> 2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 15-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 24-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. Applicant's arguments filed June 16, 2004 have been fully considered but they are not persuasive.

a. The applicant argues that the Rhoads and/or Cox et al reference do not teach employing the results of a first extracting step to determine whether a process for extracting second information from an image is to be performed. The examiner disagrees. Cox discloses employing the results of a first extracting step (Group of G separated into three groups based on the frequency; column 8, lines 36-38 and lines 57-58) to determine whether a process for extracting second information from an image is to be performed (based on the G Group, it determines which G values to be used and does not compute further processing for other G Groups, in turn, it determines whether a process for extracting second information from an image is to be performed (column 8, lines 36-67).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

Art Unit: 2625

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-9, 11-14 and 24-34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads (US 6,122,403) in view of Cox et al. (US 6,154,571).

The arguments presented in paragraph 1 above as to the applicability of the references are incorporated herein.

Regarding claim 1, Rhoads discloses a digital watermarking system for linking computer system using the information in data objects comprising the steps of:

a first information extraction step of extracting information including a registration signal (column 10, lines 21-43), including a registration signal used to correct the geometrical distortion of an image.

Rhoads discloses the use of second information (figure 24, elements 970 and 972) without specific details regarding the determination step of employing the results obtained at the first step.

In the same field of endeavor, however, Cox discloses a robust watermarking system comprising a determination step for employing the results obtained at the first step to determine whether second information is to be extracted (column 8, lines 52-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the second step for extracting information as taught by Cox in the watermarking system of Rhoads because Cox provides Rhoads with a robust watermarking system that provides much better control over image fidelity

Art Unit: 2625

and is adaptable so that the model of the human visual system and the techniques used for handling attacks on the image information can be changed later without having to change the detector.

As to claim 2, Rhoads discloses the first information and the second information are embedded in the image as invisible or less visible electronic watermarks (column 71, lines 1-35).

As to claim 3, Rhoads disclose the division step for dividing the image and selection step for selecting the block (figures 21A and 21B).

As to claims 4-5, Rhoads discloses the first information indicates the image includes a specific image (column 29, line 61 through column 30, line 60).

As to claims 6-8, Rhoads discloses the first and second information being added to components of the image that are easily discerned by a human's eyes to identify paper currency, securities or a copyrighted image (column 59, lines 10-65). Additionally, such watermarking systems are routinely used for paper currency and copyrighted material as being also disclosed by Cox (see column 1, lines 8-60) and other prior art made of record in the instant application.

As to claim 9, Rhoads discloses a determination step of determining whether the specific image is included; an image process is performed based on the image (column 20, lines 6-44).

As to claims 11-14, Rhoads discloses the first information is smaller than the second information, requires shorter time than the first and present in the greater area (figure 18, elements 852 and 864, figure 27A and figure 42).

As to claims 24-34 and 36, claims 24-34 and 36 recite substantially very similar limitations as that of claims 1-9 and 11-14 and are similarly analyzed.

3. Claims 10 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads (US 6,122,403) in view of Cox et al. (US 6,154,571) as applied to claims 1-9, 11-14 and 24-34, 36 and further in view of Horigane (US 6,334,721).

Regarding claims 10 and 35, while Rhoads discloses the use of printers and scanners (column 10, lines 5-50) without specific details regarding the method of claim 1 being performed by printer driver.

In the same field of endeavor, however, Horigane discloses a printing system wherein the method of claim 1 is being performed by a printed driver (column 5, lines 10-45 and column 8, lines 41-58).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the printer driver as taught by Horigane in the watermarking system of Rhoads because the printing system of Horigane enables application data to be printed out at any printer even if machine-readable code is embedded in the application data.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yon Couso whose telephone number is (703) 305-4779. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YJC

  
YON J. COUSO  
PRIMARY EXAMINER

October 28, 2004